

A DESCRIPTION AND EVALUATION
OF THE DEVELOPMENTAL AND REMEDIAL READING PROGRAM
IN THE COMMON LEARNINGS PROGRAM FOR SEVENTH GRADERS
AT BRODY JUNIOR HIGH SCHOOL, DES MOINES, IOWA
1969-1970

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CHAPTER I

INTRODUCTION

American education has a history characterized by change. Purposes for education have changed. Schools in the seventeenth century produced ministers and laymen who could read their Bibles. Today's schools must produce a literate populace to meet the challenges of a complex industrial, technological world. Curriculum in education has changed. Early school curriculum put heavy stress on intellectual studies. Modern schools have wide offerings to meet the varied academic, vocational, artistic and social needs of the students. Students have changed. Students who responded when called upon have their modern counterparts who answer without being asked and question the why of things insistently.

The changes have been warranted, sometimes coming too slowly, but always to meet a need. The current pattern of educational change reflects concern for individual differences among students, for interrelationships among disciplines, for feelings and attitudes students acquire through education, for a more efficient educational system that evaluates its process and product systematically.

In the last decade these concerns have resulted in a variety of innovative ways of reorganizing learning experiences. The Common

Learnings program at Brody Junior High School in Des Moines, Iowa, is one example of an innovative educational program designed to meet specific current needs.

I. STATEMENT OF THE PROBLEM

The selected problem is the description and evaluation of the developmental and remedial reading instruction in the Common Learnings program for the seventh graders at Brody Junior High School, Des Moines, Iowa, during the school year 1969-1970.

Reading instruction in the Common Learnings program had several components: (1) all the teachers, three social studies and three English teachers, became, in effect, reading teachers; (2) all the students were scheduled into "reading labs" three times a week, a minimum of twenty-five minutes per lab session being spent on reading practice materials; (3) in other class sessions labeled English, Social Studies, Skill Studies, Library, using units developed by the teachers, special attention was given to vocabulary study and to "how to read" the assigned text chapters, booklets, and articles related to the unit topics; (4) during the second semester, for the severely retarded readers, thirteen students, special sessions twice a week with a remedial reading teacher were provided.

II. DEFINITIONS OF TERMS USED

Developmental reading instruction. Developmental reading means that reading progress occurs in stages which may require guidance or at least opportunity for directed reading. The instruction involves helping students use practice materials and providing supervised reading time.

Remedial reading instruction. Remedial reading instruction means that special attention is given to the students in the form of diagnosing reading difficulty and supplying reading practice materials chosen to fit the needs determined. All pupils selected for remedial instruction were more than two years below the normal for their chronological age group.

SRA and EDL. The abbreviations SRA and EDL refer to two publishing companies which produce reading materials. SRA stands for Science Research Associates. EDL is the abbreviation for Educational Development Laboratory.

SQ3R. The abbreviation SQ3R refers to a reading approach following these steps: survey, question, read, review, and recite.

Lab. The term lab as it is used in this study is not an abbreviation for the word laboratory although there is a relationship between the two words. The term lab is a name for a group of students which was

formulated deliberately to produce a heterogeneous mixture on the basis of reading ability, Intelligence Quotient scores, and school records. The students in the lab do work on reading laboratory materials, but they do other things as well, such as independent and small group activity projects.

Mod. The abbreviated form of the word module is used almost exclusively when reference is made to the twenty-five minute class period. The word mod, therefore, is used in this paper instead of the longer form.

III. BACKGROUND OF THE PROBLEM

At Brody Junior High School in September, 1968, a learning structure called Common Learnings was initiated on the seventh grade level. The structure incorporated several factors: team teaching with an English teacher, a geography teacher, a reading teacher, a guidance counselor relating the subject matter, skills, goals, and procedures which they recognized in common; a block of time concept, allowing for the flexible scheduling of a large group (sixty students) and small groups (six to twenty students) based homogeneously or heterogeneously depending on need or ability; a modification of the tracking system by mixing basic and general students; a problem centered approach emphasizing group process, critical thinking and self-evaluation; an

emphasis on reading skills, remedial and developmental, since reading was seen as the common key to success in all areas.

The Common Learnings project developed from the recommendation of a study committee which examined the reading needs from first grade through twelfth in Des Moines schools. Common Learnings is primarily an attempt to meet the needs for improved reading development on the junior high level. However, the other features--team teaching, block of time, problem-centered approach--are integral to this learning structure.

For the 1969-70 school year some changes and additions were made. The team of teachers was expanded to six; another group of sixty students was added to the morning block so that an average of 120, with a maximum of 135, students met with the six teachers in varied groupings. In the afternoon, three of the teachers met with another group of seventy students; the Common Learnings population numbered about 200.

Another change involved subject matter choice and unit construction. From a general consideration of man in relationship to his environment, under the theme "Small World," with topics such as transportation, communication, population, land forms and climate, industry and agriculture, education, and recreation during the first year of the program, the subject matter became truly problem centered and relevant to

current social problems for the second year of the program. For the first semester the problems were these:

Education Revolution	(Ecuador)
Population Explosion	(India)
Industrialization and Urbanization	(Japan)
Housing	(United States)
Food	(Africa)
Pollution	(Europe)

For the second semester the topics were the following:

War and Defense	(Southeast Asia)
Drugs	(Middle East)
Crime	(Australia)
Generation Gap	(Russia)
Racial Prejudice	(Africa)
Sports--The Image of Man	(United States)

The countries or areas following the topics were points of comparison with the problem situation identified locally and also nationally in the United States.

Each unit consisted of a three week study of the problem. The units were designed, two by each teacher, to develop concepts about the problems by a correlated, concentrated approach. Each unit contained, in addition to the concept statements, word study exercises, reading assignments, discussion period outlines, activity project suggestions, large group program schedules, all interrelated and unified. The unit outline, prepared in the form of a booklet, was given to each student on the first day of the unit. The specific goals for each unit, methods of evaluation, and a description of the activities were included

in each booklet. An orientation session with the booklet gave the student an overview of what was expected from him and how he could contribute to the development of the concepts in each problem area. As the units were developed throughout the year, students participated by evaluating the units, making suggestions for changes, and indicating aspects of the topics they wanted to pursue.

The general objectives of the Common Learnings program are:

1. To enable students to develop attitudes about self, others, education, and community.
2. To enable students to be contributing members of the school society.
3. To enable students to improve their communication skills, particularly reading skills.
4. To enable students to extend their cognitive abilities: recalling information, interpreting facts, drawing conclusions, making inferences and projections.
5. To enable students to become aware of important social problems.
6. To enable students to extend their knowledge of Des Moines, Iowa, and selected areas in the United States and countries throughout the world.

IV. IMPORTANCE OF THE PROBLEM

The Common Learnings project at Brody Junior High School is a three-year pilot project for the Des Moines schools. The data accumulated from the study, both empirical and statistical evidence, will be the basis for conclusions and recommendations. The results will be a basis for decisions as to the adaptation of the Common Learnings program in other junior high schools in the city.

The data from the standardized reading test analyzed for this study will be part of the basis for the recommendations. In addition, the survey which attempted to assess attitudes toward reading and reading instruction can serve as a guide for future attitude surveys.

There were many aims which the teachers in the program voiced. In addition to the objectives stated previously, in terms of expectations for students in reading and communication skills, attitude development, cognitive knowledge in content fields, the program was designed to do the following:

1. To provide a framework for the development of the natural relationship between communication skill and the ideas to be communicated.
2. To refine the system of grouping students for instruction.
3. To improve the use of teacher time and talents through team teaching.

4. To utilize and experiment with a flexible, block-of-time schedule.
5. To produce a curriculum which was relevant to current societal needs.

Models for the Common Learnings program came from different sources. Ideas for thematic and problem-centered units came from Shorewood Junior High School, near Detroit, Michigan, and from schools in California that used "unipacs." Ideas for modular scheduling and attitude surveys came from Park Hill Junior High and Bishop Hogan Senior High School in Kansas City, Missouri. Ideas for grouping students came from Hubert Olson Junior High School near Minneapolis, Minnesota. Programs which allowed students freedom to make choices were observed at Urbandale Junior High School, Urbandale, Iowa. A model for a program with a "relevant" curriculum was obtained from the New Horizons Program operating in some of the junior high schools in Des Moines, Iowa. Plans for differentiated staffing and team teaching came from schools in Temple City, California, and Cherry Creek, Colorado. These were just a few of the models which helped to shape the Common Learnings program at Brody Junior High School in Des Moines, Iowa.

Although the total Common Learnings program cannot be evaluated at this time, certain empirical statements can be made: the work

in communication skills was correlated with the social problems upon which the three-week units were based; the students were grouped by ability, by interest in different ways for different classes; the teachers did plan together and teach together and did use cooperatively materials prepared by the teachers in the team; the schedule contained large group sessions, seminars, modules, and regular class periods; the topics chosen for the units were major problems confronting modern society.

The fact that the Common Learnings project incorporated all these aspects, based upon prominent educational models, makes it an important educational program.

V. LIMITATION OF THE PROBLEM

The Common Learnings program is a complex educational program with many objectives and aims. Since limitation was necessary for this field study, only parts of two of the objectives stated for the program were chosen for description and analysis: (1) to enable students to improve their reading skills; (2) to enable students to improve their attitudes toward school, specifically toward instruction and practice in reading.

Evaluation instruments were selected and administered to the students relative to these objectives. For this reason, this field study

describes and analyzes this limited aspect of the total Common Learnings program.

VI. PURPOSE AND PROCEDURE

The purpose of the study is two fold; the first part is a description; the second is an evaluation. The description attempts to explicate, to explain in detail what constituted reading instruction; to describe the varied materials used, such as the individualized reading kits published by SRA and EDL; to describe the composition of the reading labs, the grouping, the ability range, taking one lab as an example; to describe the vocabulary study which was designed as part of the reading instruction; to describe the SQ3R approach used to read unit materials; to describe the discussion seminars.

The evaluation is an analysis of the pre and post testing of a block of 119 students and a block of fifty-nine students using a standardized reading test that was given in September, 1969, and May, 1970. The evaluation also includes an analysis of a survey given to the block of 119 students containing questions about attitudes toward reading and reading lab experiences.

The procedure in this study followed certain definite steps:

(1) an overview of the Common Learnings program; (2) a survey of recent literature relative to the reading instruction in the program; (3) the tabulation and analysis of the data from the pre and post standardized reading

tests administered to the students; (4) the describing of the material used in the reading labs; (5) the describing of the population of one of the reading labs; (6) the construction, administration, and analysis of the attitude survey about reading given to the students; (7) the description of the structure and content of the skill study mods; (8) the describing of the SQ3R method of reading used with the class reading assignments; (9) the description of the discussion seminars which placed stress on oral language development, which underlies reading skill; (10) the writing of a list of recommendations for next year's Common Learnings program based on the data used in the study.

CHAPTER II

SURVEY OF THE LITERATURE

The Common Learnings program at Brody Junior High School has been based on the position that development and extension of reading skills should be provided for in the secondary school curriculum. This position has many advocates.

The need for reading instruction in secondary schools. DeBoer revealed how great individual differences can be among eighth grade students. His research showed that a typical eighth grade class has a range of eight or more grades in reading ability. Among 50,000 eighth grade students only fourteen per cent had eighth grade reading ability. Also, the reading interests of these students varied greatly. DeBoer felt that provision for individualized reading instruction in the secondary schools must be made.¹

A study published by the National Association of Secondary School Principals stated the need to do something about reading in the senior high school thus:

1. Today there are more students in high school; therefore, there

¹John J. DeBoer, "About Reading and the High School Student," English Journal, XLVII (May, 1958), 275.

is an overall lower average aptitude for reading and academic work.

2. Students stay in school longer; if they are to benefit from the additional educational opportunities, reading instruction is important.
3. The elementary schools pass on now most students automatically.
4. Approximately fifteen to twenty-three per cent of the students are handicapped in reading.¹

In another article in the same journal, Irvins and Hogg discussed causes of reading deficiencies in the junior high school. They cited the need for adequate counseling and guidance as a part of the reading program, mentioned the need to give attention to pupil interests as a factor in reading instruction, and stated the need for an extension of the scope of reading programs in the high school. Also stressed was the need to educate teachers to accept a total reading program and to understand that since students are on different reading levels, more than one text for a subject is necessary.²

¹J. V. Cooper, and W. G. Patterson, "What Should We Do About Reading in Senior High School?" National Association of Secondary School Principals Bulletin, XLII (April, 1958), 105, 110.

²W. Irvins, and H. Hogg, "What Should We Do About Reading in the Junior High School?" National Association of Secondary School Principals Bulletin, XLII (April, 1958), 56-69.

Artley reviewed reports published by the National Society for the Study of Education: in 1925 secondary reading programs were proposed; in 1937 refinement of reading tastes, interests, and habits were suggested for junior high school curriculum; in 1946 the society concluded that reading maturity cannot be achieved in elementary school, defining reading maturity as

a high level of reading competence that enables the reader to proceed with reasonable ease and understanding in grasping and interpreting meanings, in reacting rationally to the ideas apprehended, and in applying his ideas with sound judgment and discrimination.¹

Artley also reported on the implications of a study made by Gray and Rogers which revealed that (1) adults who had completed high school were superior in reading only to a limited extent to those who had completed only eighth grade; (2) there was a general low level of reading competence among adults; (3) reading competence does not, in and of itself, make for complete reading maturity, since the mature reader also looks on reading as a source of pleasure, understanding and insight. Artley's conclusion could be restated in this way: the secondary school has a responsibility to develop motives and promote interests which in turn will provide the purpose to use reading skills,

¹A. S. Artley, "Development of Reading Maturity in High School: Implications of the Gray-Rogers Study," Education Administration and Supervision, XLIV (October, 1957), 321-8.

concurrently developed in high school.¹

Recently, Moore has reported what research revealed about reading in content fields in secondary schools:

. . . that reading should be taught in all terms of elementary and secondary school and that all pupils of all levels of ability, from the slow to the brilliant, should have training to develop reading skills.²

A report by Early on the state of reading programs in the last decade showed that "reading instruction in the secondary schools has become an accepted goal, though it is still an infrequently achieved one." The reading instruction in the secondary schools generally emphasized remedial rather than developmental reading. One study of upper Midwest schools showed that twenty-seven out of forty-two schools surveyed provided remedial reading instruction. This special instruction was provided most often in English classes. Twenty-one out of the twenty-seven schools reported this practice.³

Krug supported the position of providing for reading instruction in the secondary schools.

The teaching of reading is no longer regarded as the exclusive responsibility of the elementary schools. The role of the high school in reading moreover is not confined to remedial instruction; it includes the continued development of reading skills on higher

¹Ibid., p. 324-6.

²Walter J. Moore, "What Does Research in Reading Reveal About Reading in the Content Fields?" English Journal, LVIII (May, 1969), 708.

³Margaret J. Early, "What Does Research in Reading Reveal About Successful Reading Programs?" English Journal, LVIII (April, 1969), 534.

levels of understanding and appreciation. High on the list of reading objectives for the high school are the refinement and continued development of reflective or critical reading. . . and the development of reading for enjoyment.¹

The literature does show that developmental reading instruction in the secondary school is necessary and desirable. In line with this need the Common Learnings reading labs were designed.

Every teacher a reading teacher. The idea that the reading instruction should generally be done by regular classroom teachers also has support in the literature.

The goal is to have the reading instruction take place in the regular classroom as a natural, expected activity. The idea that learning to read and reading to learn are exclusive tasks is not a valid one. In the classroom at any level there is a continual fluctuation from the one task to the other, depending on need. Early stated:

The ultimate goal remains the infusion of reading skills instruction into all school subjects where reading is an important mode of learning. . . where reading skills, habits and attitudes would be extended and refined as students encounter increasingly complex materials.²

Reinforcing this idea is Moore's observation that "the individual teacher, whatever her level, is the key person in any program

¹Edward Krug, Curriculum Planning (Evanston: Harper Row Publishing Company, 1957), p. 138-9.

²Margaret J. Early, "What you owe to the teaching of reading. . .," Professional Growth for Teachers (Croft Educational Services, 1962), 1-4.

designed to develop readers who perform well at the more mature levels." Moore also pointed out that achieving higher reading levels, developing higher reading abilities does not happen incidentally; that such results occur when the educational program helps the students realize that learning through reading is possible for them and that learning to read is developmental.¹

Hatfield felt that reading instruction in the curriculum should involve more than just the English teachers. He said that current practices of providing for reading in the curriculum are based on two false assumptions:

(1) the development of the utilitarian language skills is only the business of the reading and language arts classes, and (2) the activities in the reading and language arts classes can by themselves develop satisfactory mastery of such skills.²

The importance of developing reading skills as a part of the English curriculum, however, has been stressed by the National Council of Teachers of English:

A good secondary English program includes instruction in advanced reading skills, such as reading for specific purposes, adapting speed to material and purpose, critical reading, skimming and use of indexes and other tools.³

¹Early, op. cit., p. 535.

²W. W. Hatfield, "Humanizing the Language Arts," Elementary English, XLII (October, 1965), 673.

³"The First Two R's--Plus," (A pamphlet prepared by the National Council of Teachers of English), p. 8.

Showing the interrelatedness of the language skills to the total curriculum was Faeder's study. His program, researched in a Michigan training school, reported success when every teacher became a teacher of English. The philosophy was one of saturation whereby the students practiced reading and writing consistently in every class. The students understood that all the teachers were concerned about their students' literacy. The teachers communicated to the students "the sense that reading and writing can be as natural to existence as walking and talking."¹

Karlin summarized research findings, showing that reading is composed of different skills specifically related to the material being read. One study showed that interpretive reading takes a different skill from literal reading; another study demonstrated that the vocabulary of mathematics required special reading ability. The conclusion was that basic instruction in reading is insufficient. Special instruction in the secondary schools is needed.²

More specifically, the advanced reading skills, sometimes called study skills, have been identified by researchers. Sheldon, for example, included these skills in a list for efficient, mature readers:

¹Daniel N. Faeder and Elton B. McNeil, Hooked on Books: Program and Proof (New York: Berkley Publishing Corporation, 1968), p. 26.

²Robert Karlin, "What Does Research in Reading Reveal About Reading and the High School Student," English Journal, LVIII (March, 1969), 388.

skimming; outlining; summarizing, organizing ideas; taking notes; using the parts of a book; using reference materials; and reading and interpreting maps and charts.¹

Robinson listed some of the special skills in a different way: "following directions; interpretation; evaluation; organization; retention; and locating information." He believed also that "study skills are best taught by using content-area materials" since meaning and function is combined in the process.²

The goal to work toward, as Early has stated, is that all teachers will someday soon come to accept the idea that "every teacher who uses reading as a major learning tool can contribute to the students' developing powers in reading." The vital continuity of reading instruction from the elementary school on through high school will be established and maintained. Basic skills in reading taught by elementary teachers, extended in the high school within the English classes or in separate reading courses, will be reenforced by subject teachers "responsible for showing students how to apply skills to specific content." This teaching would cover word analysis techniques for technical

¹William D. Sheldon, The Sheldon Basic Reading Series (Boston: Allyn and Bacon, 1961), p. 66.

²Alan H. Robinson, "A Cluster of Skills: Especially for Junior High Schools," The Reading Teacher, XV (September, 1961), 25-28.

terms, study methods adapted to specific subject materials, selection and evaluation of concepts and ideas gained from content reading, and planning reading related to the subject. Early stressed the importance of the subject-matter teacher in the role of a teacher of reading. She said that "the specialist in mathematics, science, history or geography knows better than anyone else both the form and content of his subject." The logical conclusion is that the subject matter teacher is best qualified to teach the students to read the materials in his field.¹

All of the teachers in the Common Learnings program, language, literature, geography, history majors, primarily, became teachers of reading. Each was assigned a group of students, a lab, with whom they worked on reading development. Also each teacher was responsible for including in the units he developed word study exercises and reading materials not only related to the topic, but also to the reading interests and levels of the students.

Attitudes affect learning. Another aspect of the Common Learnings program was a concern for students' attitudes, important for motivation and consequently for learning. Two kinds of attitudes were considered: attitudes toward self and attitudes toward reading. The

¹Margaret Early, "What you owe to the teaching of reading...", Professional Growth for Teachers, (Croft Educational Services, 1962), p. 4.

relationship between positive self image and success in reading was recognized by the teachers. In the literature, support for concern about attitudes is recorded.

Faeder and McNeil's research placed emphasis on attitudes. Their experimental group was exposed to "English in Every Classroom," a special program based on three points:

The approach to literature is social rather than literary; pleasure and enthusiasm must be the first goal of every teacher.

The teacher selects and creates his own program suited to the students, using a rich supply of paperbacks, magazines and newspapers.

Teaching of language skills is accomplished through organic rather than mechanic means, that is, the activities are meaningful and relevant to the students' needs.

The experimental group had a higher self-esteem rating at the end of the year than did the control group. The conclusion was "this self-view is crucial to each child's ability to respond to the world of words."¹

In Faeder and McNeil's study the self-image and literacy efforts tests showed no statistical difference in the scores between the experimental and control group. However, the attention given to attitudes by the researchers showed how important they considered attitudes to be. They stated that "education and self-worth are necessary

¹Daniel N. Faeder, and Elton B. McNeil, Hooked on Books: Program and Proof (New York: Berkley Publishing Corporation, 1968), p. 204.

complements to one another."¹

McCullough, discussing interpretive reading, referred to the importance of attitudes in reading:

As interpretation is in a sense a harvest of all elements in the reading process, failure in it suggests the need for diagnosis of the entire process, including the students' attitude toward the process, to determine the deficiencies.²

According to Oppenheim, the diagnosis or appraisal should follow these criteria:

The child should know where he is and how he feels about his reading; the teacher should know where the child is in his growth toward desirable interests and attitudes about reading; analysis should point out areas in which the teacher may plan for experience leading to growth in interests and attitudes necessary for the successful reader.³

Frymeir reported on the motivational factor in secondary school reading programs. Motivation, defined as "that which gives both direction and intensity to human behavior," encompasses attitudes since attitudes direct behavior. This research revealed that students who have a strong desire to learn and do achieve well in school differ from under-achievers in four ways: in "self-concept, values, orientation toward

¹Faeder and McNeil, op. cit., p. 202.

²Constance M. McCullough, "What Does Research in Reading Reveal About Practices in Teaching Reading?" English Journal, LVIII (May, 1969), 702.

³June Oppenheim, "Appraising Reading Interests and Attitudes in Kindergarten through Grade Three," New Perspectives in Reading Instruction (New York: Pitman Publishing Company, 1964), p. 702.

time, and openness to experience."¹

Attitudes and motivation are difficult to deal with. Nevertheless, consideration of these factors in reading programs is vital. The Common Learnings teachers, aware of motivational factors, attempted to assess the attitudes of their students toward themselves and toward reading itself.

¹Jack R. Frymeir, "Motivating Students to Learn," National Education Association Journal, LVII (February, 1968), 37-39.

CHAPTER III

RESULTS: DESCRIPTION AND EVALUATION

The results of the study are contained in Chapter Three. First, a description of the materials and methods comprising the Common Learnings program is presented. Second, a description of one of the Reading Labs is included as a sample of the population involved in the study. Evaluative statements are made about some of the described Reading Lab items. Third, the results of the Gates MacGinitie Standardized Reading Test given to the study population are presented. Interpretive statements about the results are made. Fourth, the results of the attitude survey about reading instruction and practice given to two-thirds of the study population are presented. Inferences drawn from the data are stated.

I. MATERIALS AND METHODS IN READING PROGRAM

Reading lab materials. Reading materials for the reading labs were primarily the individualized, programmed kits published by SRA and EDL. Three SRA kits were used: Maps and Globes, Graph and Picture Study Skills, and SRA Reading Lab II C; three EDL kits were used: Science, Social Studies and Reference Study Skills kits. The six reading kits were rotated from lab to lab every six weeks. This way each

student during the year had some opportunity to work in each different kit, each one emphasizing a different kind of reading skill or a different phase of the reading process.

The SRA and EDL kits are organized similarly, each including the following features: (1) skill cards which contain the reading lessons and exercises; (2) key cards which contain the answers to the exercises; (3) the study cards which contain the instructions and background information needed to do the lessons; (4) with the SRA kits, student booklets containing activity projects which ask the student to apply the skills he has practiced in the lessons as well as demonstrate at the beginning of the lessons his skill level; with the EDL kits, application lessons included on the back of the lesson cards; (5) progress charts kept by the student to record graphically in terms of percentage or number correct the scores on each lesson.

Different sections or units in each kit emphasize different types of reading skill. For example, the Map and Globes and Picture Study Skills kits give the student practice in getting information from graphic forms, understanding how information is organized for presentation in graphic form, and drawing inferences from the graphic forms. The SRA Reading Lab II C and the EDL Science and Social Studies kits emphasize finding the main idea, recognizing details, noting detail sequence, drawing conclusions; the reading material, either science or social

studies oriented, is like text material, magazine articles, or journal reports; some of the lessons in these kits emphasize vocabulary study: understanding specialized terms, analyzing words structurally, phonemically and morphemically, getting meaning from context clues. The EDL Reference kit gives the student practice in alphabetizing, in identifying items on card catalog entries, in finding information in reference books, in using periodical indexes, in understanding the Dewey Decimal system.

Supplementary materials were also used as needs were determined by the teachers. This material included: (1) the Field Enterprises Checkered Flag Series; (2) the EDL Tach-X Vocabulary and Spelling materials for junior high school; (3) the EDL Controlled Reader film strips and practice books for third through ninth grade reading levels; (4) the Scott Foresman Basic Reading Skill Books for Junior High School; (5) the Reader's Digest Skill Builders for the third through sixth grade levels; (6) the Be a Better Reader Workbooks published by Scott Foresman Company; (7) the two levels of Tactics in Reading published by Scott Foresman; (8) the Listen and Read series produced by EDL; (9) an array of selected paperbacks from American Education Publications and Scholastic publications; (10) Scholastic Scope Magazine for junior high school students; (11) the Des Moines Register and Tribune delivered daily for several weeks at a time in class sets.

Reading lab population. The population for each reading lab was determined according to a principle: each reading lab would be a heterogeneous group of students, a mixture of boys and girls, and a mixture of reading abilities as determined by the sixth grade Iowa Tests of Basic Skills scores and a mixture of Intelligence Quotients as recorded in the cumulative records. The students in the Reading Labs also met in the same groups for the Activity mods, during which time group interaction and positive attitude development was stressed. The heterogeneous group was able to use easily the individualized reading kit materials and had opportunity to work closely with students of varying abilities during the Activity mods. The relationship between positive attitudes and reading progress was supported by this arrangement: the students and teacher with whom the individual pupil interacted closely were the same group with whom they worked in the Reading Lab mods.

Reading lab organization. The kits are organized on reading levels from three to eight, providing different starting points for students with different reading abilities. The kits provide for movement from level to level depending on student progress. This provision for the students to start on lessons on their reading levels provided encouragement right from the beginning. They found they could understand the directions and could comply with most of the requirements of the initial lessons. Evidently success encouraged them. With confidence

established early, the students seemed to be willing to try more difficult and more complex reading lessons.

The provision for recording their scores on progress charts also was a motivational factor for the students. They could see at a glance how many lessons they had done within a period of time, how their scores had ranged and at what rate they had progressed from their starting levels to more advanced levels. Since the students worked on different lessons most of the time, there seemed to be less interest in how well others did and more interest in how the students themselves progressed, rated against their own initial levels.

With row monitors who handled the distribution of folders and reading materials, the students were self starting, using efficiently the limited twenty-five minutes in the reading lab mods for work on reading; the students did not need to wait for the teacher to start the class on an assignment, but they could receive help from the teacher when it was needed.

The factors of self-starting sessions, programmed materials with answer keys for immediate feedback, individual starting levels for the heterogeneous groupings, graphic representation of progress, positive self image attitudes carried over from the activity mods all contributed to the effectiveness of the reading labs in the development and maintenance of reading skills.

Skill study mods. In the Common Learnings program, special attention was given to vocabulary development and word analysis. Each student was scheduled for two skill study mods per week. During this time, he received instruction and practice in word study. The words studied were key words chosen from the unit materials and listed in the unit booklets. An outline of the word study was given with each word list, the list containing from ten to thirty words.

The study progressed from a phonemic analysis to a structural analysis, and then to a syntactic analysis of the words as they functioned in sentences. Accompanying the formal study was always a semantic analysis: what meanings did the words have as they were used in the unit materials? Was only one meaning appropriate? Did the derivation of the words add insight into the word meanings?

The behavioral objectives which guided the skill study sessions were these: could the student pronounce or spell the words correctly? Did the student add some of the words to his speaking or writing vocabulary? Did the student develop adequate meanings for the words?

The study process for the mods contained the following procedures: paired study--two students working together and testing each other; trial tests--the teacher asking the students questions; dictionary use--finding the words, choosing the appropriate definition, checking the pronunciation and derivation; word games--matching cards

containing words and definitions, matching cards containing words and synonyms or antonyms, matching cards containing words and the number of syllables in the words.

SQ3R reading method. Instruction in the use of the SQ3R reading method, originally presented in SRA materials in 1946 but modified to just SQR in the 1960 SRA materials, was provided for in the Commons Learnings classes. Related to reading techniques for textbooks, magazine articles, and newspapers, this method directed the student to follow certain steps in reading: (1) survey for which the "S" stood: skim over the material to get a general idea of the content and organization; begin to relate what is known to the new material; (2) question for which the "Q" stood: read questions provided in the text; think up original questions which might be answered in the material; (3) read for which the first "R" stood: read the sections of the articles or chapter carefully noting the titles, subheads, pictures and captions, topic sentences, key words, summary sentences; (4) review for which the second "R" stood: answer the questions based on the materials read; (5) recite for which the third "R" stood: share with someone else the ideas and answers which have resulted from the reading activity.

Discussion seminars. The two discussion seminars per week which were scheduled for the mods following the two large group sessions

served several purposes. The main purpose was to give the students opportunity to draw together, to crystallize the ideas which resulted from the large group presentation--a film, a speaker, a panel, a demonstration, a dramatization, or a video-taped program. This opportunity for students to share and compare ideas and information was considered a necessary step in concept development. The second purpose for the discussion seminars was the opportunity for the students to develop group discussion techniques, to recognize and understand the different roles which participants take in group discussion, to know and use the problem solving steps in discussion, to develop the speech techniques necessary for group discussion.

The last purpose of the seminar was to give students opportunity to use the specialized vocabulary for each unit which they had heard used in the large group presentations and which were included in the unit reading materials. This emphasis on oral language use and vocabulary development was seen as an important aspect of the reading program, since reading depends on the decoding of the graphic system to produce the spoken language equivalent. The larger the listening and speaking vocabulary the student has, the greater the results of the decoding process, that is, the better the student can read.

The three factors, skill study mods, use of SQ3R reading method, and discussion seminars emphasizing special vocabulary use, were considered supporters for the reading skills and attitudes developed in

reading lab and therefore were important aspects of the total reading program.

II. DESCRIPTION OF ONE OF THE READING LABS

Sample reading lab student characteristics. Student (1) was a bright boy who was painfully shy; he seemed to recoil if addressed directly. His confidence improved as the year progressed; he never moved into a group leadership role willingly; however, by May, he seemed better adjusted to social situations, which was great progress for him.

Student (2) was a girl, red-headed and outspoken, who had few friends and said she preferred to work alone; she made several friends during the year, but retained many of her dominant ways.

Student (3) was a girl, dark-eyed, quick, a leader for her group of friends; she was conscientious and set a good example throughout the year.

Student (4) was a girl, extra tall for her age, a factor which seemed to bother her; she was defensive about her person and about pet issues; she learned to control her temper somewhat during the year. She had strong motivation to excell.

Student (5) was a girl who was very concerned about doing her work, doing it carefully, and correctly. She assumed leadership roles in class, was especially good at helping students (16) and (18), who

were her neighbors at home, with reading lessons or class work.

Student (6) was a girl who also worked hard and wanted to see credit given to her for each effort expended. She preferred to work with one other student, having little concern for what other students did. She served for a time as a small group leader but did not wish to continue this role.

Student (7) was a girl, soft-voiced, slow speaking, wiry. She had artistic talent which would not stop; when she was encouraged, she produced much art work related to units studied. An attitude, early labeled lethargic, proved to be a misnomer; she was a dreamer.

Student (8) was a pretty girl, very interested in boys. She had other things on her mind more important to her than school work. When she wanted to, she would do good school work. She was a pleasant person to be associated with; she never seemed to demand much from anyone.

Student (9) was a boy who had some difficulty with reading but was conscientious and tried to do well. He was somewhat slow in responding in class, but diligently would attempt any assignment.

Student (10) was a girl who never did come down from cloud nine throughout the whole year. Boys, friends, clothes and status were her world. Most of the time school work did not count. She would participate in small group work, occasionally, but then back to cloud nine she would go.

Student (11) was a small, but sturdy boy who had strong motivation to do well. He was competitive by nature and was a positive example for Student (1), who was a friend.

Student (12) was a frail looking girl with braces, black-rimmed glasses, straight blonde hair. She too had a private world, shared occasionally with others. She had difficulty in getting herself organized to do anything and so seldom finished work on time.

Student (13) was a girl, evidently from an underprivileged home, who sought attention. She was argumentative, talkative, restless. However, on group projects she could be a strong leader.

Student (14) was a girl who was very opinionated; she had been picked on by classmates each year because she was stubborn and would not give an inch. She was the oldest child in the family and evidently assumed responsibilities at home. She was not a light-hearted person, but seemed to feel content when she could spend some time privately each day with a teacher.

Student (15) was a girl with a pronounced nasality which she recognized and tried to hide by refraining from class participation. She too was interested in boys rather than school work, although if the two could be combined in a small group project, she would work and help the group function.

Student (16) was a boy who had great difficulty with reading. He was willing to work on reading and participated eagerly in special

reading sessions. He was physically strong and outshone the other students in races and games.

Student (17) was a boy, very small for a seventh grader. He was always ready with quick answers, had a sense of humor and generally made the class lively, even though he did little work himself.

Student (18) was a boy also slow in reading who would try if given some encouragement. He did have a temper which caused him difficulty, but he seemed well accepted by the class.

Analysis of Sample Reading Lab Items

Intelligence quotient item. (See Appendix A, Table I for data.)

The students in the Reading lab ranged in Intelligence Quotient scores from 122 to 82 with an average of 100. These scores correlated closely with the standardized reading test scores with two noticeable exceptions: Student (9) with an Intelligence Quotient of 88 had a higher score on the pre reading test than did students with comparable Intelligence Quotient scores. His diligent effort may have made the difference. The other student, number (12), with an Intelligence Quotient of 114 scored lower on the pre reading test than did students with comparable Intelligence Quotients. Her pattern of disorganization may have been a factor affecting her test score. She did show an eighteen month gain in reading level on the post reading test which would confirm the potential indicated

in the Intelligence Quotient score.

Reading level item. The reading levels indicated by the Gates-Mac Ginitie Reading Test ranged from 12.9 to 2.6. This was a typical range for a Reading Lab. Fifteen of the eighteen students showed an improvement on the post reading test, scoring from two months to thirty months' increase in reading level at the end of the year. The average increase was eleven months. Nine months' reading level increase per school year is considered "normal." Eight students or 44 per cent showed an increase in reading level of nine months or more. Seven students ranged in reading level increase from two months to eight months. Student (17) showed no change in reading level. The significant factor might have been his lack of application to work in school. Student (1) with an Intelligence Quotient of 122, who scored at the 12.9 reading level on the pre test, showed a loss of thirty-nine months on the post test. Another test should be given to test the validity of that score. Some reading loss may have occurred, but the gain in self confidence and social skills would offset any reading level loss, in the opinion of the writer. Student (9), as mentioned earlier, with an Intelligence Quotient of 88, may have reached a learning plateau.

It was interesting to note that Student (6) with an Intelligence Quotient of 113 and Student (15) with an Intelligence Quotient of 92 both showed a reading level increase of twenty-six months. For

student (6), a worker, the gain is commendable, but not surprising. For Student (15), a "vacationer," the gain is phenomenal. In the same category with Student (15), although at a higher Intelligence Quotient level, was Student (8) with a gain of thirty months. For Student (8), unassuming, quiet, with an Intelligence Quotient of 109, the reading improvement was almost too good to believe. However, comments and questions which Student (8) made throughout the year suggested ability not utilized.

The average reading level gain of eleven months by the students in the sample Reading Lab compared closely with the average gain of twelve months demonstrated by the total morning block of 119 students of which the sample Reading Lab was a part. If the Sample Reading Lab could serve as an indicator, the above average gains scored by the 119 Common Learnings students were due to outstanding increases in reading levels achieved by a comparatively small number of students and mediocre increases demonstrated by most of the students with an insignificant number of students showing losses in reading level. That some students did increase their reading levels was encouraging. That more students could increase their reading levels was challenging. That the attitudes of some students seemed to affect their reading achievement was demanding of further research into the development, control, and assessment of attitudes by classroom teachers.

Reading Lab Survey item. The Reading Lab Survey discussed in section four of Chapter III (see Appendix A, Table II for copy of survey and item analysis data) provided a useful item for the sample Reading Lab analysis. The weighted responses to each of the ten items were totaled for each sample Reading Lab student. Since five points was the highest weighting for a response, and there were ten items on the survey, a score of fifty points was possible. A response of twenty-five or below was considered a negative response; a response of twenty-six or above was considered a positive response. (See Appendix A, Table I for data.) Sixteen or eighty-eight per cent of the eighteen students scored positive responses on the Reading Lab Survey. The range of total responses was from twenty-one to forty-five. Eight students, forty-four per cent, of the group, scored from twenty-one to twenty-nine points; eight students, forty-four per cent, scored from thirty to thirty-nine points; two students or twelve per cent scored forty to forty-five points.

This analysis which showed positive attitudes to reading lab experiences based on the weighted totals correlated with the item analysis of the responses which the block of 119 Common Learnings students made to the survey. The general student attitude toward Reading Lab materials and organization was positive in the sample Reading Lab. The positive attitudes may be a crucial factor in producing positive student reading level change.

Self Concept Scale item. The Self Concept Scale was administered (see Appendix A, Table I for data; see also copy of scale in Appendix A) during the first semester to the students in the sample Reading Lab. At the same time the Reading Lab teacher marked a scale rating each of the students in the Lab. At the end of the second semester the students again rated themselves on the self concept scale.

There were twenty-five personal traits listed, such as friendly, obedient, cooperative, cheerful, follow directions, and confident. The student marked one of three columns to show his self estimate: almost never (weighted one point); half the time (weighted two points); nearly always (weighted three points). Seventy-five points was the highest possible score. On the first marking, four students scored in the seventy range; eight students scored in the sixty range; six students scored in the fifty range. The same pattern occurred in the results on the second marking. Considered as a group, the Lab showed no change in self concept. Individually, however, some students recorded changes in self concept: Students (5) and (16) showed a gain of thirteen points. Student (4) showed a loss of eleven points; Student (15) showed a loss of sixteen points. Ten students showed a gain; nine students showed a loss.

No correlation was apparent between the totals on this scale and the reading level scores. The large number of students who showed

a loss on the Self Concept Scale, as compared with the small number of students who showed a loss on the reading level score, may have been due to, at the second marking, a greater awareness of self, a greater willingness to make a true self estimate. The results also indicated, perhaps, that the instrument needed to be refined or that techniques of attitude development, like group interaction, which were utilized in the Common Learnings classes, needed to be refined.

There was an interesting relationship between the teacher's estimate of the student and the second self estimate which the student made: eleven of the second estimates made by the students had moved in the direction of the earlier estimate made by the teacher. Seven estimates did not move in such a direction. Only a speculation could be made about this pattern: the teacher may be a strong influence on the attitude development of the students in his classroom. If so, closer study of the teacher-student relationship with refined instruments needs to be made, with special emphasis on recognizing the attitudes that the teacher holds for each of his students and describing how the teacher communicates these attitudes to the student. If the teacher influence on attitude development is significant, then this aspect of the educational environment warrants study.

III. RESULTS OF GATES-MacGINITIE STANDARDIZED READING TEST

The instrument used to measure the reading development of the seventh graders in Common Learnings was the Gates-MacGinitie Reading Test, Survey E. This test, published in 1965 by Teachers College, Columbia University, is one designed for use in grades seven through nine. The forms of the test used were 1M and 2M, the machine scored separate answer sheet edition. Each form contained three sections: speed and accuracy, vocabulary, and comprehension. The answer sheets used were not the standard forms supplied with the tests since these could not be scored by the Polk County computer services which did the scoring. Instead, a standard answer sheet was used, requiring a modification in marking procedures.

For the vocabulary and comprehension sections, which are timed at fifteen minutes and twenty-five minutes, respectively, the use of the standard answer sheet, rather than the special company one, produced no problem. However, in the speed and accuracy section, allotted only four minutes, the students had difficulty making the conversion from one answer form to another when they felt the pressure of the time limitation. For this reason the speed and accuracy section did not seem to produce a reliable score and was not included in the post testing. Therefore, only the comprehension and vocabulary sections are included in the analysis.

The teacher's manual which accompanied the test described several ways to interpret the scores. One way was to average and compare the grade equivalents from the pre and post tests. As a check for accuracy and also for use in a statistical formula to check for significant change, the raw scores were also added and averaged. The results of the computation follow: (see Appendix B, Tables III and IV for the individual scores from which the data of this chapter were obtained).

Comprehension. Each block of students was considered separately and then combined for a total score. The morning block with a population of 119, with a mean Intelligence Quotient of 102, containing basic, low general and general students, scored a mean grade equivalent of 6.6 in September on the Comprehension section of the test. This meant that the average grade equivalent was the sixth year, sixth month. In May the mean grade equivalent had risen to 7.9, a difference of 1.3. The average grade equivalent gain was twelve months. The whole number "one" represents a school year of nine months. The three-tenths represents three additional months. The range of grade equivalent scores was 2.6 to 12.9 in September; in May the range was 2.6 to 12.9, the highest point in the scale. In September, nine scores were in the 2.6 to 3.1 range; only three May scores were in that range. In September, three scores were 12.9; six students scored this high in May.

The afternoon block containing fifty-nine general track students, with a mean Intelligence Quotient of 104, showed a greater gain. The September mean grade equivalent was 6.4; the May mean score was 8.2, a gain of 1.8 or seventeen months' growth in one school year. The range of grade equivalent scores was 2.6 to 12.1 in September; in May the range was 2.9 to 12.9. In September, three scores were in the 2.6 to 3.1 range; only one score was in that range in May. In September, no scores were recorded at the 12.9 level; in May six scores were recorded there.

When the grade equivalent scores from both blocks were averaged, the September mean score was 6.5; the May score was 8.0, an average gain of 1.5 or fourteen months' growth in one school year.

Vocabulary. In the Vocabulary section, the results are as follows: for the morning block of 119 students, the September mean grade equivalent was 7.2; in May it was 8.4, a gain of 1.2 or eleven months. For the afternoon block of fifty-nine students, the September mean grade equivalent was 6.7; in May, 8.6; this was a gain of 1.9 or eighteen months, two school years' growth in one year.

The combined scores in the Vocabulary section yielded these averages: in September, the mean was 6.9; in May it was 8.5, a gain of 1.6 or fifteen months.

Comparison of 1968-1969 scores. Available for comparison were the mean Comprehension grade equivalent scores for the Common Learnings blocks in 1968-1969. The morning block of fifty-eight basic and general track students, with a mean Intelligence Quotient of 92.2, had, in September, a mean grade equivalent of 5.60; in May it was 6.46. This was a gain of .86 or 8.6 months' growth. The mean gain of twelve months recorded by the 1969-1970 Common Learnings morning block is four months beyond this. However, the mean Intelligence Quotient of the 1969-1970 group was 9.8 points higher than that of the 1968-1969 group.

The afternoon block of fifty-eight general track students in 1968-1969, with a mean Intelligence Quotient of 101.9, had a mean comprehension grade equivalent of 7.06 in September; in May it was 8.67, a gain of 1.6 or fifteen months. The mean growth of seventeen months recorded by the 1969-1970 afternoon block was two months more than the 1968-1969 mean. Again, the mean Intelligence Quotient of the 1969-1970 group was 2.1 points higher than that of the 1968-1969 group.

Analysis of basic students' scores. (See Appendix B, Table V for data.) In the morning block of 120 students, twenty-one were identified by the guidance counselors as basic students. This group, considered separately, had a mean Intelligence Quotient of 85. In the Comprehension section of the Gates-MacGinitie Reading Test, the basic group had

a mean grade equivalent of 3.9 in September. In May, this group had a mean grade equivalent of 4.98, showing a gain of 1.08 or a full nine months' growth in comprehension during the year.

In the Vocabulary section of the test, the basic group of twenty-one students had a mean grade equivalent of 5.25 in September. In May, this group had a mean grade equivalent of 6.1, showing a gain of .85 or 8.5 months' gain during the school year.

Available for comparison were the mean grade equivalents on the Comprehension section of the Gates Test for the 1968-69 group of basic students, numbering twenty-eight. This group had a mean Intelligence Quotient of 84. They had a mean grade equivalent of 4.25 in September; in May their mean grade equivalent was 4.57, a gain of 3.2 months.

The 1969-70 basic group on the Comprehension section of the Gates Test showed a gain of .76 or 7.6 months over the gain of the 1968-69 basic group. Factors which may be related to this increased gain in the mean comprehension grade equivalent of the 1969-70 group are: (1) teachers were better trained to set up and operate the reading labs, since three of the teachers were completing their second year in the program; (2) a greater emphasis consistently was placed on vocabulary study. In each unit fifteen to thirty words, related to the topic and used in the reading materials and discussion, were studied. The study involved, at various times, phonetic analysis, structural

analysis, derivation, meaning in context, dictionary definition, synonyms and antonyms. The method of study also varied: puzzles, games, contests, stories, study with partners, self-testing; (3) five of the students had special remedial reading instruction twice a week during the second semester.

IV. RESULTS OF ATTITUDE SURVEY ABOUT READING

An attitude survey was given to the students during the last month of school, May, 1969.¹ Listed were ten statements to which the students reacted on a point scale from one to five. The rating of one was equivalent to the reaction "not at all" or "never"; the rating of five meant "a lot" or "all the time." The points between were explained as degrees of feeling between these extremes.

The students were told that the information on the survey would help the teachers evaluate the reading lab activities and materials; the reactions would indicate how the labs should be modified for the program next year. The students put their names on the survey sheets. There was also an opportunity for the students to explain what their ratings meant as they answered the questions listed at the bottom of the sheet. The answers seemed to be thoughtful and candid.

¹A graphic representation of the responses to the reading lab attitude survey is included in Appendix A, Table II.

With a response of "5" meaning "a lot" and "1" meaning "not at all," the 122 responses averaged 3.34 to the item "I like to read."

On the second item, "I put forth effort during lab to improve my skills," 119 responses averaged 3.53.

On the item, "I improved my ability to comprehend what I read," 122 responses averaged 3.54.

On the fourth item, "I improved my skill in reading maps and graphs," 118 responses averaged 3.55.

On the item, "I improved my reading vocabulary," 122 responses averaged 3.59.

On the sixth item, "The reading labs helped me improve my reading," 122 responses averaged 3.43.

On the item, "The time in the reading lab was used wisely by the students," 122 responses averaged 2.86.

On the eighth item, "The attitude of the students toward reading was positive," 125 responses averaged 2.92.

On the item, "Recording my reading lab scores helped me," 124 responses averaged 3.04.

On the last item, "Recording my reading lab scores was done regularly," 122 responses averaged 3.88.

All of the items averaged a response of 3.+ except two, items seven and eight. The items which averaged above 3.+ had three or four

times as many responses in the "4" or "5" columns as were recorded in the "1" and "2" columns. Items seven and eight which averaged 2.86 and 2.92 had nine to fifteen more responses in columns "1" and "2" than were recorded in columns "4" and "5."

An interesting contrast appeared in the responses to items two and seven. Item two asked the student to tell how much effort he had put forth individually in reading lab. Item seven asked the student to judge the effort the other students had put forth in reading lab. The average response 3.53 to item two, contrasted with the average response 2.86 to item seven, indicated perhaps that the students felt something like this: "I'm a pretty good kid, but those other kids waste time." The teacher's interpretation should recognize the general dissatisfaction with the efforts expended by the students in the lab. The question raised is "How can the reading lab period be organized so that more students feel a general satisfaction with students' reading lab efforts?"

A similar contrast between items one and eight was noted. The average response to item one was 3.34, to item eight, 2.92. Item one asked the student to indicate his personal feelings about reading. Item eight asked him to judge the other students' feelings toward reading. This positive to negative contrast is consistent with the contrast between items two and seven, possibly for the same reasons. For the teacher, the results should suggest that some changes in the reading program are

needed that would produce a more positive general attitude toward reading.

Items three through six assessed the students' feelings about their own reading skill development. The average response to each item was approximately 3.5, which indicated positive feelings about reading skill development.

Concerning classmates' reading efforts, the group did show negative attitudes. However, as individuals recording their own reading development, the group was positive. The latter attitudes were consistent with the positive results of reading test scores.

CHAPTER IV

SUMMARY AND CONCLUSIONS

The problem for this field study was the description and evaluation of the developmental and remedial reading instruction in the Common Learnings program for the seventh graders at Brody Junior High School, Des Moines, Iowa, during the year 1969-1970. The description included materials and methods used and the composition and performance of one of the reading labs. The evaluation covered the tabulation and comparison of results from the pre and post Gates-MacGinitie Standardized Reading Test given to two blocks of students;¹ it also included an analysis of an attitude survey about reading, administered to one of the blocks of students.²

Summary. Generally, the study showed that the students in the Common Learnings blocks made more than normal increases in reading level during the year, one of the goals of the program. The morning block of students, with a mean Intelligence Quotient of 102, showed a mean grade equivalent increase in Comprehension of twelve months. The afternoon block, with a mean Intelligence Quotient of 104, showed

¹Appendix B, Table III.

²Appendix B, Table IV.

a mean grade equivalent increase in Comprehension of seventeen months. The total group of 178 students scored a mean grade equivalent increase in Comprehension of fourteen months.

In Vocabulary, the results were similar. The morning block of 119 students showed a mean grade equivalent increase in Vocabulary of eleven months. For the block of fifty-nine students, the mean grade equivalent increase in Vocabulary was eighteen months. The total group of 178 students showed a mean grade equivalent increase in Vocabulary of fifteen months.

These results for the 1969-1970 Common Learnings students were consistent with the 1968-1969 results, both showing a more than normal increase in students' reading levels. When a pilot project can show such positive results two years in a row, the designers and sponsors of the project are gratified. An experimental project, the first year, often will show positive results because of the "halo" effect. However, if the positive results are repeated, then the positive results can be attributed to the program itself.

Conclusion. There are several components in the Common Learnings program which probably affected the results: (1) the stress placed on positive attitude development: the teachers believed that students' positive attitude toward themselves, their classmates, and their school affected positively the students' academic work, particularly their

reading progress. This supposition seemed to be supported by the study.

(2) The use of individualized, programmed materials, accompanied by a wide range of supplementary reading materials: the instruction and practice geared to the individual student's needs provided by the reading labs was an important factor in student reading development. (3) The emphasis placed on oral language development: the discussion and activity mods provided opportunity for oral language development, a necessary component of a reading program, since reading is the process of decoding the graphic system to produce the oral language equivalent. (4) The instruction and practice in the SQ3R method of reading and the skill study mods used for vocabulary development: these factors provided explicit direction for developmental reading, contributing to the positive increase in students' reading comprehension and vocabulary.

The relationship between attitude and achievement needs to be studied further. The study results suggest that more specific knowledge about attitude development and measurement would aid students' academic progress. The interesting relationship between the teacher's attitudes about the students and the direction of change in students' attitudes about themselves also deserves further study. Motivation has long been identified as the key to academic success. Since attitudes are inherent in the motivational processes, teachers concerned about the academic success of their students would do well to direct their

attention and energies to the methods of attitude development, the specifics of group interaction, and the techniques of attitude evaluation.

Much research in this area is needed.

Recommendations. Recommendations concerning the Common Learnings program for the 1970-1971 school year, based upon the results of this study, are these: (1) the project should be continued for the third year; (2) the design of the program should remain basically the same, with some modification of the reading lab mods so that students will feel that all the students in the lab are using their reading lab time profitably; (3) additional methods to affect attitude development and to assess attitude change should be tried. If the third year of the Common Learnings project demonstrates positive results in reading level increase and positive attitude development, the project can then serve as a curriculum model for other junior high schools in Des Moines, Iowa.

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APPENDIXES

APPENDIX A

TABLE I

SAMPLE READING LAB DATA:
INTELLIGENCE QUOTIENTS, READING TEST SCORES,
ATTITUDE SURVEY TOTALS, SELF CONCEPT SCALE RESULTS

Students	Intelligence Quotients 6th Grade Large Thorndike	Gates-MacGinitie Reading Test; Composition Grade Equivalent: September	Composition Grade Equivalent: May	Point Difference: Pre and Post Tests	Reading Lab Attitude Survey Ten Items: Weighted Totals	Self Concept Scale Pre Test	Self Concept Scale Post Test	Point Difference: Pre and Post Tests	Self Concept Scale Teacher Rating
1	122	12.9	8.6	-4.3	36	56	62	+ 6	60
2	119	10.9	11.4	+ .5	27	66	60	- 6	67
3	106	8.2	8.4	+ .2	39	71	72	+ 1	72
4	115	8.0	8.6	+ .6	32	67	56	-11	56
5	101	7.8	8.6	+ .8	40	59	72	+13	70
6	113	7.2	10.0	+2.8	32	65	66	+ 1	70
7	106	7.2	7.4	+ .2	45	71	72	+ 1	51
8	109	6.7	10.0	+3.3	36	71	67	- 4	62
9*	88	6.2	5.8	- .4	27	56	55	- 1	65
10	97	5.8	6.7	+ .9	36	63	62	- 1	49
11	103	5.3	6.2	+ .9	29	45	50	+ 5	55
12	114	4.6	6.5	+1.9	23	66	65	- 1	57
13	100	4.3	5.3	+1.0	32	65	57	- 8	68
14*	91	3.4	4.5	+1.1	28	58	59	+ 1	61
15	92	3.2	6.0	+2.8	29	70	54	-16	56
16*	63	3.1	3.4	+ .3	34	62	75	+13	51
17*	92	2.9	2.9	0	21	61	64	+ 3	61
18*	82	2.6	2.9	+ .3	27	58	67	+ 9	53

*Indicates "basic" classification.

TABLE II
 READING LAB ATTITUDE SURVEY
 COMMON LEARNINGS 1969-70 MORNING BLOCK

SURVEY STATEMENTS	Number of Responses	Rating Scale "not at all" to "a lot"					Weighted Totals	Average Response
		1	2	3	4	5		
1. I like to read	122	3	18	56	24	21	408	3.34
2. I put forth effort during lab to improve my reading skills	119	1	17	33	53	15	421	3.53
3. I improved my ability to comprehend what I read	122	1	22	36	41	23	432	3.54
4. I improved my skill in reading graphs and maps	118	4	12	43	29	30	423	3.55
5. I improved my reading vocabulary	122	3	9	46	35	30	439	3.59
6. The reading labs helped me improve my reading	122	8	23	31	32	30	419	3.43
7. The time in the reading lab was used wisely by the students	122	8	33	50	25	5	349	2.86
8. The attitude of the students toward reading was positive	125	12	33	50	23	7	365	2.92
9. Recording my reading lab scores helped me	124	12	35	31	27	19	378	3.04
10. Recording my reading lab scores was done regularly	122	3	15	25	29	50	474	3.88

Name _____ Lab _____

SELF-CONCEPT SCALE

Each of us needs to know more about what we are like. This form is to help you describe yourself. There are no right or wrong answers; each person may have different ideas. Answer these according to your feelings. It is important for you to give your own honest answers.

Think carefully, mark column that indicates best your self-estimate on each of the personal traits listed. For example, if you think you are "friendly" "nearly always," then mark the first column. If you need further directions, ask your teacher for help.

THIS IS THE WAY I AM

	(1) ALMOST NEVER	(2) HALF THE TIME	(3) NEARLY ALWAYS
1. Friendly	_____	_____	_____
2. Obedient	_____	_____	_____
3. Thoughtful	_____	_____	_____
4. Careful	_____	_____	_____
5. Smart	_____	_____	_____
6. Polite	_____	_____	_____
7. Clean	_____	_____	_____
8. Kind	_____	_____	_____
9. Unselfish	_____	_____	_____
10. Ambitious	_____	_____	_____
11. Cooperative	_____	_____	_____
12. Cheerful	_____	_____	_____
13. Sincere	_____	_____	_____
14. Studious	_____	_____	_____
15. Successful	_____	_____	_____
16. Likeable	_____	_____	_____
17. A good sport	_____	_____	_____
18. Dependable	_____	_____	_____
19. Honest	_____	_____	_____
20. Happy	_____	_____	_____

SELF-CONCEPT SCALE (cont'd.)

- | | | | |
|-----------------------|-------|-------|-------|
| 21. Popular | _____ | _____ | _____ |
| 22. Do my homework | _____ | _____ | _____ |
| 23. A leader | _____ | _____ | _____ |
| 24. Follow directions | _____ | _____ | _____ |
| 25. Confident | _____ | _____ | _____ |

APPENDIX B

TABLE III

GATES-MacGINITIE STANDARDIZED READING TEST
COMMON LEARNINGS BLOCK OF 119 STUDENTS
RESULTS: SEPTEMBER-MAY

September 1969						May 1970			
119 Students Morning Block	Comprehension Raw Score	Comprehension Grade Equivalent	Vocabulary Raw Score	Vocabulary Grade Equivalent		Comprehension Raw Score	Comprehension Grade Equivalent	Vocabulary Raw Score	Vocabulary Grade Equivalent
1.	39	9.2	24	8.6		47	12.9	30	11.0
2.	10	3.1	22	7.9		19	4.6	16	5.8
3.	18	4.5	24	8.6		28	6.7	17	6.2
4.	41	10.0	26	9.2		38	8.9	36	12.9
5.	36	8.4	21	7.7		32	7.6	23	8.3
6.	29	7.0	31	11.5		35	8.2	25	8.9
7.	30	7.2	22	7.9		41	10.0	31	11.5
8.	24	5.8	14	5.2		24	5.8	16	5.8
9.	37	8.6	18	6.6		25	6.0	23	8.3
10.	18	4.5	26	9.2		30	7.2	26	9.2
11.	10	3.1	13	4.9		13	3.6	19	6.9
12.	30	7.2	33	12.9		44	11.4	34	12.9
13.	43	10.9	18	6.6		40	9.6	28	10.0
14.	20	4.8	17	6.2		19	4.6	15	5.5
15.	27	6.5	18	6.6		28	6.7	15	5.5
16.	19	4.6	25	8.9		34	8.0	29	10.5
17.	33	7.8	16	5.8		35	8.2	26	9.2
18.	20	4.8	10	4.1		31	7.4	20	7.3
19.	34	8.0	24	8.6		36	8.4	26	9.2
20.	22	5.3	20	7.3		27	6.5	17	6.2
21.	30	7.2	35	12.9		41	10.0	40	12.9

TABLE III (continued)

22.	10	3.1	19	6.9		22	5.3	24	8.6
23.	28	6.7	17	6.2		41	10.0	23	8.3
24.	45	12.1	20	7.3		43	10.9	24	8.6
25.	11	3.2	10	4.1		12	3.4	17	6.2
26.	26	6.2	14	5.2		38	8.9	19	6.9
27.	41	10.0	25	8.9		44	11.4	26	9.2
28.	19	4.6	9	3.9		32	7.6	17	6.2
29.	36	8.4	23	8.3		38	8.9	25	8.9
30.	18	4.5	13	4.9		25	6.0	18	6.6
31.	26	6.2	21	7.7		24	5.8	14	5.2
32.	27	6.5	19	6.9		33	7.8	17	6.2
33.	13	3.6	13	4.9		19	4.6	15	5.5
34.	31	7.4	19	6.9		37	8.6	24	8.6
35.	31	7.4	0	3.2		33	7.8	25	8.9
36.	18	4.5	9	3.9		11	3.2	17	6.2
37.	23	5.5	21	7.7		33	7.8	21	7.7
38.	42	10.4	31	11.5		43	10.9	28	10.0
39.	11	3.2	17	6.2		25	6.0	23	8.3
40.	34	8.0	19	6.9		37	8.6	26	9.2
41.	22	5.3	22	7.9		26	6.2	23	8.3
42.	12	3.4	18	6.6		18	4.5	15	5.5
43.	9	2.9	15	5.5		9	2.9	18	6.6
44.	39	9.2	9	3.9		39	9.2	28	10.0
45.	24	5.8	15	5.5		31	7.4	17	6.2
46.	9	2.9	4	3.2		19	4.6	8	3.6
47.	15	3.9	6	3.2		29	7.0	15	5.5
48.	25	6.0	18	6.6		19	4.6	17	6.2
49.	40	9.6	24	8.6		44	11.4	26	9.2
50.	20	4.8	16	5.8		10	3.1	16	5.8
51.	34	8.0	24	8.6		37	8.6	32	12.2
52.	41	10.0	26	9.2		39	9.2	28	10.0
53.	47	12.9	28	10.0		37	8.6	30	11.0
54.	36	8.4	17	6.2		39	9.2	18	6.6
55.	11	3.2	14	5.2		28	6.7	19	6.9
56.	26	6.2	28	10.0		40	9.6	19	6.9
57.	31	7.4	22	7.9		37	8.6	21	7.7
58.	28	6.7	25	8.9		41	10.0	32	12.2
59.	42	10.4	25	8.9		42	10.4	32	12.2
60.	24	5.8	16	5.8		28	6.7	22	7.9
61.	16	4.1	15	5.5		21	5.1	21	7.7
62.	36	8.4	19	6.9		41	10.0	27	9.5

TABLE III (continued)

63.	46	12.9	29	10.5		45	12.1	30	11.0
64.	14	3.7	21	7.7		38	8.9	29	10.5
65.	38	8.9	15	5.5		35	8.2	19	6.9
66.	45	12.1	15	5.5		40	9.6	25	8.9
67.	29	7.0	26	9.2		38	8.9	30	11.0
68.	12	3.4	15	5.5		21	5.1	12	4.6
69.	35	8.2	15	5.5		36	8.4	22	7.9
70.	45	12.1	24	8.6		49	12.9	31	11.5
71.	30	7.2	17	6.2		31	7.4	29	10.5
72.	17	4.3	17	6.2		24	5.8	18	6.6
73.	29	7.0	16	5.8		32	7.6	24	8.6
74.	27	6.5	18	6.6		27	6.5	16	5.8
75.	19	4.6	22	7.9		27	6.5	20	7.3
76.	15	3.9	19	6.9		27	6.5	19	6.9
77.	27	6.5	15	5.5		20	4.8	18	6.6
78.	27	6.5	16	5.8		37	8.6	25	8.9
79.	43	10.9	35	12.9		44	11.4	35	12.9
80.	38	8.9	26	9.2		46	12.9	32	12.2
81.	34	8.0	27	9.5		36	8.4	29	10.5
82.	36	8.4	21	7.7		35	8.2	24	8.6
83.	15	3.4	14	5.2		18	4.5	19	6.9
84.	21	5.1	22	7.9		45	12.1	28	10.0
85.	35	8.2	22	7.9		36	8.4	26	9.2
86.	29	7.0	14	5.2		25	6.0	28	10.0
87.	34	8.0	19	6.9		34	8.0	22	7.9
88.	11	3.2	13	4.9		27	6.5	24	8.6
89.	20	4.8	18	6.6		24	5.8	17	6.2
90.	33	7.8	26	9.2		31	7.4	26	9.2
91.	36	8.4	20	7.3		42	10.4	29	10.5
92.	25	6.0	11	4.4		30	7.2	17	6.2
93.	17	4.3	18	6.6		26	6.2	22	7.9
94.	15	3.9	19	6.9		39	9.2	23	8.3
95.	19	4.6	15	5.5		29	7.0	19	6.9
96.	36	8.4	31	11.5		51	12.9	39	12.9
97.	28	6.7	19	6.9		36	8.4	19	6.9
98.	17	4.3	13	4.9		22	5.3	22	7.9
99.	29	7.0	23	8.3		29	7.0	21	7.7
100.	46	12.9	30	11.0		44	11.4	32	12.2
101.	38	8.9	19	6.9		39	9.2	25	8.9
102.	15	3.9	24	8.6		42	10.4	25	8.9
103.	33	7.8	24	8.6		40	9.6	24	8.6

TABLE III (continued)

104.	45	12.1	42	12.9		51	12.9	39	12.9
105.	42	10.4	25	8.9		45	12.1	31	11.5
106.	20	4.8	20	7.3		36	8.4	22	7.9
107.	10	3.1	16	5.8		24	5.8	22	7.9
108.	10	3.1	23	8.3		29	7.0	27	9.5
109.	42	10.4	22	7.9		38	8.9	28	10.0
110.	22	5.3	17	6.2		37	8.6	19	6.9
111.	33	7.8	17	6.2		37	8.6	23	8.3
112.	6	2.6	7	3.4		9	2.9	11	4.4
113.	25	6.0	19	6.9		39	9.2	26	9.2
114.	10	3.1	5	3.2		12	3.4	13	4.9
115.	15	3.9	19	6.9		32	7.6	30	11.0
116.	20	4.8	13	4.9		26	6.2	18	6.6
117.	35	8.2	27	9.5		32	7.6	23	8.3
118.	20	4.8	24	8.6		46	12.9	28	10.0
119.	22	5.3	21	7.7		36	8.4	26	9.2
Total	3182	786.6	2322	852.6		3857	941.5	2779	1005.0

TABLE IV

GATES-MacGINITIE STANDARDIZED READING TEST
COMMON LEARNINGS BLOCK OF 59 STUDENTS
RESULTS: SEPTEMBER-MAY

59 Students Afternoon Block	September 1969					May 1970			
	Comprehension Raw Score	Comprehension Grade Equivalent	Vocabulary Raw Score	Vocabulary Grade Equivalent		Comprehension Raw Score	Comprehension Grade Equivalent	Vocabulary Raw Score	Vocabulary Grade Equivalent
1.	26	6.2	13	4.9		25	6.0	16	5.8
2.	24	5.8	5	-3.2		24	5.8	19	6.9
3.	40	9.6	32	12.2		44	11.4	30	11.0
4.	42	10.4	22	7.9		36	8.4	24	8.6
5.	10	3.1	10	4.1		9	2.9	11	4.4
6.	44	11.4	20	7.3		47	12.9	32	12.2
7.	27	6.5	3	-3.2		38	8.9	20	7.3
8.	23	5.5	26	9.2		30	7.2	28	10.0
9.	34	8.0	19	6.9		38	8.9	23	8.3
10.	33	7.8	24	8.6		32	7.6	28	10.0
11.	22	5.3	2	-3.2		29	7.0	22	7.9
12.	22	5.3	16	5.8		35	8.2	20	7.3
13.	31	7.4	29	10.5		38	8.9	39	12.9
14.	26	6.2	13	4.9		18	4.5	11	4.4
15.	22	5.3	15	3.9		32	7.6	16	5.8
16.	13	3.6	16	5.8		27	6.5	14	5.2
17.	45	12.1	5	-3.2		47	12.9	35	12.9
18.	41	10.0	21	7.7		34	8.0	18	6.6
19.	17	4.3	14	5.2		23	5.5	21	7.7
20.	31	7.4	22	7.9		43	10.9	22	7.9
21.	36	8.4	23	8.3		31	7.4	23	8.3
22.	30	7.2	25	8.9		29	7.0	24	8.6

TABLE IV (continued)

23.	27	6.5	14	5.2		35	8.2	19	6.9
24.	22	5.3	18	6.6		30	7.2	21	7.7
25.	39	9.2	20	7.3		39	9.2	30	11.0
26.	45	12.1	22	7.9		50	12.9	36	12.9
27.	19	4.6	15	5.5		24	5.8	29	10.5
28.	13	3.6	30	11.0		46	12.9	36	12.9
29.	16	4.1	22	7.9		27	6.5	21	7.7
30.	18	4.5	23	8.3		34	8.0	27	9.5
31.	35	8.2	17	6.2		40	9.6	25	8.9
32.	16	4.1	22	7.9		26	6.2	24	8.6
33.	16	4.1	21	7.7		26	6.2	29	10.5
34.	14	3.7	16	5.8		22	5.3	17	6.2
35.	9	2.9	6	3.2		39	9.2	20	7.3
36.	28	6.7	15	5.5		29	7.0	20	7.3
37.	26	6.2	20	7.3		28	6.7	21	7.7
38.	13	3.6	25	8.9		48	12.9	33	12.9
39.	17	4.3	12	4.6		21	5.1	21	7.7
40.	15	3.9	15	5.5		33	7.8	26	9.2
41.	34	8.0	24	8.6		41	10.0	31	11.5
42.	45	12.1	26	9.2		43	10.9	24	8.6
43.	28	6.7	7	3.4		38	8.9	21	7.7
44.	21	5.1	3	3.2		39	9.2	20	7.3
45.	26	6.2	19	6.9		21	5.1	29	10.5
46.	23	5.5	23	8.3		27	6.5	25	8.9
47.	5	-2.6	11	4.4		27	6.5	14	5.2
48.	29	7.0	22	7.9		42	10.4	22	7.9
49.	19	4.6	21	7.7		36	8.4	22	7.9
50.	31	7.4	19	6.9		29	7.0	19	6.9
51.	23	5.5	14	5.2		33	7.8	19	6.9
52.	35	8.2	23	8.3		32	7.6	34	12.9
53.	13	3.6	23	8.3		47	12.9	29	10.5
54.	26	6.2	19	6.9		24	5.8	16	5.8
55.	13	3.6	7	3.4		38	8.9	23	8.3
56.	17	4.3	22	7.9		27	6.5	18	6.6
57.	40	9.6	25	8.9		40	9.6	23	8.3
58.	34	8.0	19	6.9		34	8.0	27	9.5
59.	40	9.6	24	8.6		45	12.1	28	10.0
Total	1529	378.2	1059	395.0		1969	483.2	1395	506.6

TABLE V

GATES-MacGINITIE STANDARDIZED READING TEST
COMMON LEARNINGS GROUP OF 21 BASIC STUDENTS
RESULTS: SEPTEMBER-MAY

September 1969						May 1970			
21 Students Basic Group	Comprehension Raw Score	Comprehension Grade Equivalent	Vocabulary Raw Score	Vocabulary Grade Equivalent		Comprehension Raw Score	Comprehension Grade Equivalent	Vocabulary Raw Score	Vocabulary Grade Equivalent
1.	10	3.1	22	7.9		19	4.6	16	5.8
2.	11	3.2	10	4.1		12	3.4	17	6.2
3.	18	4.5	13	4.9		25	6.0	18	6.6
4.	26	6.2	21	7.7		24	5.8	14	5.2
5.	13	3.6	13	4.9		19	4.6	15	5.5
6.	18	4.5	9	3.9		11	3.2	17	6.2
7.	12	3.4	18	6.6		18	4.5	15	5.5
8.	9	2.9	15	5.5		9	2.9	18	6.6
9.	9	2.9	4	3.2		19	4.6	8	3.6
10.	15	3.9	6	3.2		29	7.0	15	5.5
11.	20	4.8	16	5.8		10	3.1	16	5.8
12.	11	3.2	14	5.2		28	6.7	19	6.9
13.	16	4.1	15	5.5		21	5.1	21	7.7
14.	17	4.3	17	6.2		24	5.8	18	6.6
15.	27	6.5	18	6.6		27	6.5	16	5.8
16.	15	3.9	19	6.9		27	6.5	19	6.9
17.	15	3.4	14	5.2		18	4.5	19	6.9
18.	11	3.2	13	4.9		27	6.5	24	8.6
19.	19	4.6	15	5.5		29	7.0	19	6.9
20.	6	2.6	7	3.4		9	2.9	11	4.4
21.	10	3.1	5	3.2		12	3.4	13	4.9
Total	308	81.9	284	110.3		417	104.6	348	128.1